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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,505	02/07/2002	Ikuo Kawamoto	020532	9521

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ARMSTRONG,WESTERMAN & HATTORI, LLP
1725 K STREET, NW
SUITE 1000
WASHINGTON, DC 20006

EXAMINER	
PRITCHETT, JOSHUA L	

ART UNIT	PAPER NUMBER
2872	

DATE MAILED: 01/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/067,505	KAWAMOTO ET AL.	
	Examiner	Art Unit	
	Joshua L Pritchett	2872	

-- The MAILING DATE of this communication appears on the cov r sheet with the correspond nce address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 October 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *7* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on November 6, 2001. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6, 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Motomura (JP 11-338220) in view of Kurematsu (US 5,170,194).

Regarding claim 1, Motomura teaches a polarizing member comprising a sheet-like member formed so that linearly polarized light can be obtained as transmitted light through said sheet-like member after natural light is incident on a rear surface of the sheet-like member (Fig. 1). Motomura further teaches a transmittance difference not larger than 6% between transmitted light components within a 20 nm. wide wavelength region within the region 520-640 nm

(translation page 3 para. 0018). In discussion of the transmitting properties of the polarizers Motomura teaches a difference of less than 6% based on the difference of the maximum and the minimum value of transmittance. The applicant defines transmittance difference as the difference between the local maximum and minimum within a 20 nm. wide wavelength region and therefore the claimed subject matter reads on the prior art. Motomura lacks specific reference to the angle of incidence from a line normal to the polarizer being between 0 and 80 degrees. Kurematsu teaches a polarizing element with an incident angle of light between 0 and 80 degrees to the normal of the polarizer (Fig. 1). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the incident light angle between 0 and 80 degrees with respect to the normal of the polarizer as taught by Kurematsu in the Motomura invention for the purpose of maximizing transmission of light and minimizing the reflection of light incident the polarizer.

Regarding claim 2, Motomura teaches the sheet-like member constituted by an absorptive type polarizer (4) and a reflective type polarizer (1). Motomura does not make reference to the polarization axis of the absorptive polarizer and the reflective polarizer to be parallel. Kurematsu teaches an absorptive polarizer and a reflective polarizer having parallel polarizations axes (col. 2 line 67 – col. 3 line 7). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the absorptive and reflective polarizers of Motomura have parallel polarization axes as taught by Kurematsu for the purpose of achieving higher transmission through the polarizers.

Regarding claim 3, Motomura teaches the reflective type polarizer constituted by a laminate of a quarter-wave plate (2) and a circular polarized light-separating sheet of cholesteric liquid-crystal layers (translation page 1 para. 0005).

Regarding claim 4, Motomura teaches a planar light source (8) including a reflection layer (9) on the rear surface of the planar light source and the polarizing member on the front side of the planar light source (Fig. 1).

Regarding claim 6, Motomura teaches a prism array (6) between the light source and the polarizer.

Regarding claim 8, Motomura teaches a liquid crystal cell (5) on the light exit side of the polarizer.

Regarding claim 9, Motomura teaches the liquid crystal cell bonded to the polarizing member so that the two are integral (Fig. 1).

Regarding claims 10-11, Motomura teaches a transmittance difference not larger than 6% between transmitted light components within a 20 nm. wide wavelength region within the region 520-640 nm (translation page 3 para. 0018). In discussion of the transmitting properties of the polarizers Motomura teaches a difference of less than 6% based on the difference of the maximum and the minimum value of transmittance. The applicant defines transmittance difference as the difference between the local maximum and minimum within a 20 nm. wide wavelength region and therefore the claimed subject matter reads on the prior art. The range of less than 6% includes the claimed ranges of less than 3% and less than 2%.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motomura in view of Kurematsu as applied to claim 4 above, and further in view of Kaneko (US 6,167,708).

Motomura in combination with Kurematsu teaches the invention as claimed but lacks specific reference to a peak emission line. Kaneko teaches a polarizing element and light source with a peak emission line (Fig. 12). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the peak emission line style of light emission taught by Kaneko in the Motomura in combination with Kurematsu invention for the purpose of creating a display that would be brighter in one region of the light spectrum to make the display more pleasing to the eye of the viewer.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Motomura in view of Kurematsu as applied to claim 6 above, and further in view of Huang (US 6,490,017).

Motomura in combination with Kurematsu teaches the invention as claimed but lacks reference to the prism sheet comprising two crossed prism components. Huang teaches the use of crossed prisms in a polarization element (Fig. 1; col. 1 lines 12-14). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the crossed prisms taught by Huang in the prism sheet of the Motomura in combination with Kurematsu invention for the purpose of producing colored light beams out of a white light source.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Kitagawa (US 6,404,469) teaches the transmittance difference of the maximum and minimum to be less than 2%.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua L Pritchett whose telephone number is 703-305-7917. The examiner can normally be reached on Monday - Friday 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cassandra Spyrou can be reached on 703-308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

JLP
January 24, 2003

Audrey Chang
Primary Examiner
Technology Center 2800